

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listing, of claims in the application.

Listing of the Claims:

1. (Original) A component for a shaped charge perforator, the component comprising a plastics material matrix having at least one non-explosive filler embedded therein.
2. (Currently amended) A component according to ~~any preceding~~ claim 1 comprising a first portion and a second portion, the first and second portions comprising different ratios of filler to matrix.
3. (Original) A component according to claim 1, in which the filler is distributed homogeneously throughout the matrix.
4. (Currently amended) A component according to ~~any preceding~~ claim 1 in which the component comprises a shaped charge liner.
5. (Currently amended) A component according to ~~any preceding~~ claim 1 claim in which the component comprises a shaped charge case.
6. (Original) A component according to claim 5 in which the shaped charge case is reinforced.
7. (Original) A component according to claim 6 in which reinforcement is provided by means of a preform.
8. (Original) A component according to claim 7 in which the preform is formed by at least one of hand laying up, filament winding, compression moulding, and braiding.
9. (Original) A component according to claim 6 in which reinforcement is provided by means of individual rovings.
10. (Currently amended) A component according to ~~any preceding~~ claim 1 claim in which the filler volume is in the range 45% to 85% of the combined volume of filler and matrix.

11. (Currently amended) A component according to ~~any preceding~~ claim 1 in which the filler volume is in the range 45% to 65% of the combined volume of filler and matrix.
12. (Currently amended) A component according to ~~any preceding~~ claim 1, wherein the filler comprises particles of substantially uniform size.
13. (Currently amended) A component according to ~~any preceding~~ claim 1 in which the particles size lies in the range 10-250 nm.
14. (Currently amended) A component according to ~~any preceding~~ claim 1, wherein the filler is a fibre.
15. (Currently amended) A component according to ~~any preceding~~ claim 1, wherein the filler is a flake.
16. (Currently amended) A component according to ~~any preceding~~ claim 1, wherein the filler is a non-metallic material.
17. (Currently amended) A component according to ~~any preceding~~ claim 1, wherein the ratio of filler density to matrix density is substantially unity.
18. (Currently amended) A component according to ~~any preceding~~ claim 1 in which the filler has a density in the range between 0.5 gcm⁻³ and 5 gcm⁻³.
19. (Currently amended) A shaped charge perforator comprising one or more components according to ~~any preceding~~ claim 1.
20. (Original) A shaped charge perforator according to claim 19 comprising a case, a liner and a quantity of explosive packed between the case and the liner.
21. (Currently amended) A perforator gun comprising one or more shaped charge perforators according to ~~any one of claims 19-20~~ claim 19.

22. (Original) A compound for use in manufacture of components for shaped charge perforators under vacuum, the compound comprising a plastics material matrix having at least one non-explosive filler embedded therein and in which the filler volume comprises 45% to 85% of the combined volume of filler and matrix.

23. (Original) A manufacturing method for a component for a shaped charge perforator, the method comprising compounding a matrix of plastic material with particulate filler under vacuum.

24. (Original) A method according to claim 23 in which the component comprises at least one of a shaped charge liner and a shaped charge case.

25. (Currently amended) A method according to ~~any one of claims 23-24~~ claim 23 in which the filler volume comprises 45% to 85% of the combined volume of filler and matrix.

26. (Currently amended) A method according to ~~any one of claims 23-25~~ claim 23 in which the component comprises a first portion and a second portion, the first and second portions comprising different ratios of filler to matrix.

27. (Original) A method of improving fluid outflow from a well borehole the method comprising perforating the borehole by means of a perforating gun according to claim 21.

28. (Original) A method according to claim 27 in which the fluid is one or more of hydrocarbons, water, and steam.

29. (Original) A liner for a shaped charge perforator, the liner comprising a plastics material matrix having at least one non-explosive filler embedded therein, the filler being non-uniformly distributed throughout the liner whereby to tune the liner.

30. (Original) A liner for a shaped charge perforator, the liner comprising a plastics material matrix having at least one non-explosive filler embedded therein, the liner being of non-uniform thickness whereby to tune the liner.

31. (Original) A liner for a shaped charge perforator, the liner comprising a plastics material matrix having at least one non-explosive filler embedded therein, the filler being substantially density-matched to the plastics material.